

Emission Summary

Permit Number: 971829

Company Name: Proton Power, Inc.

Source Status: New ☒ Modification ☐ Expansion ☐ Relocation ☐ Permit Status: New ☒ Renewal ☐

PSD ☐ NSPS ☐ NESHAP ☐ Previous Permit Number: Construction N/A Operating N/A

	Pounds/Hour			Tons/Year				<u>Limit</u> Applicable Standard
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change	
PM								
SFP	0.13	0.32	0.32	0.59	1.40	1.40		TAPCR 1200-03-07-.04(2) 0.25 gr/dscf
CO								
SFP	0.74	0.74	0.74	3.25	3.25	3.25		TAPCR 1200-03-07-.07(2)
NO _x								
SFP	0.31	0.31	0.31	1.37	1.37	1.37		TAPCR 1200-03-07-.07(2)
VOC								
SFP	0.30	0.30	0.30	1.32	1.32	1.32		TAPCR 1200-03-07-.07(2)
HAPs								
PWH	0.35	0.35	0.35	1.53	1.53	1.53		TAPCR 1200-03-07-.07(2)
Opacity								20%
								TAPCR 1200-03-05-.01(1)
								TAPCR 1200-03-05-.03(6)

SFP: Synthetic Fuel Production (ID 02)

PWH: Process Water Handling/Wood Vinegar Production (ID 04)

EAST PERMITTING PROGRAM

Date of Data: August 29, 2016

EPS Initials: TFR

CONSTRUCTION PERMIT SUMMARY REPORT

Company Name: Proton Power, Inc.

File Number: 73-1117-02,04

EPS: TFR

Application Received: July 11, 2016

Application Complete: August 12, 2016

Air Quality Analysis Performed? Yes ☐ No ☒

Project Description:

Proton Power, Inc. seeks to obtain an air contaminant permit for construction of a Research and Development, Synthetic Fuel Demonstration facility in Lenoir City. The proposed operation will consist of the following: Source 02: Synthetic Fuel Production (distillation drums and flare), Source 03: Biomass Drying (electric dryer, clean burn dryer), and Source 04: Process Water Handling/Wood Vinegar Production (oil/water separator). A flare will be used to control emissions from the conversion unit. There will be physical construction with regulated air contaminants emitted by the source(s).

Rules Analysis

Title V ☐ Cond. Major ☐ Minor ☒ Source category listed in 1200-03-09-.01(4)(b)1.(i)? Yes ☐ No ☒

Reason for PSD:	New source above ____ TPY	<u>N/A</u>	<input checked="" type="checkbox"/>	Sig. increase in ____ emissions	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Applicable NSPS:	40 CFR Part 60, Subpart	<u>N/A</u>	<input checked="" type="checkbox"/>	State Rule 1200-03-16-.	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Applicable NESHAP:	40 CFR Part 61, Subpart	<u>N/A</u>	<input checked="" type="checkbox"/>	State Rule 1200-03-11-.	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Applicable NESHAP:	40 CFR Part 63, Subpart	<u>N/A</u>	<input checked="" type="checkbox"/>	State Rule 1200-03-31-.	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

Other Applicable State Rules

² PM Emissions:	1200-03-	<u>07</u>	-.	<u>04(2)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	² NO _x Emissions:	1200-03-	<u>07</u>	-.	<u>07(2)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
⁴ HAP Emissions:	1200-03-	<u>07</u>	-.	<u>07(2)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	Lead Emissions:	1200-03-	_____	-.	_____	<input type="checkbox"/>	N/A <input type="checkbox"/>
² CO Emissions:	1200-03-	<u>07</u>	-.	<u>07(2)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	_____ Emissions:	1200-03-	_____	-.	_____	<input type="checkbox"/>	N/A <input type="checkbox"/>
² VOC Emissions:	1200-03-	<u>07</u>	-.	<u>07(2)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	_____ Emissions:	1200-03-	_____	-.	_____	<input type="checkbox"/>	N/A <input type="checkbox"/>

Visible Emissions from each exhaust stack not to exceed 20 % opacity per Method 9 1200-03- 05- .03(6)
1200-03- 05- .01(1)

²Synthetic Fuel Production ⁴Process Water/Wood Vinegar Production

Insignificant/Exempt Sources

The drying operation (Source 03) listed in the application is deemed insignificant per TAPCR 1200-03-09-.04(2)(a)(3).